AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1.   (Currently Amended) A tube connecting apparatus, comprising:

a holding section which holds at least two flexible tubes to press them to a flat state;

a cutting section which cuts the tubes held in a flat state by the holding section;

an electrode section for supplying electric power for heating to the cutting section;

a cutting section movement unit which moves the cutting section between a tube cutting position and a tube non-cutting position;

a cutting section detecting sensor which detects the cutting section moved by the cutting section movement unit;

a holding section movement unit which moves the holding section to change relative positions of the cut tubes such that end portions to be connected contact closely each other;

a controlling section which controls power supply to the electrode section as well as movement of the cutting section movement unit and the holding section movement unit; and

a display section for displaying information,

wherein the controlling section comprises a non-volatile memory which memorizes information expressing that the apparatus is in a connecting operation state in which the end portions of the cut tubes are being connected, and

wherein the controlling section ~~judges~~ is programmed to judge, when power is supplied, that a reset operation is necessary when the information memorized in the non-volatile memory is information expressing that the apparatus is in the connecting operation state, and initiates the reset operation during which the cutting section is heated again, the connecting operation is restarted to finish the connecting operation, and an error indication is displayed on the display section.

2.   (Currently Amended) A tube connecting apparatus according to claim 1, wherein

when the information memorized in the non-volatile memory is information expressing that the apparatus is in a connecting operation state, and, when the cutting section detecting sensor detects the cutting section moved to the tube cutting position, the controlling section ~~judges~~ is programmed to judge that the reset operation is necessary and initiates the reset operation.

3.   (Currently Amended) A tube connecting apparatus according to claim 1, further comprising:

an engagement section which engages at least a part of the holding section to prohibit the holding section from opening movement out of the pressing state of the tubes; and

a holding section lock sensor which detects an engagement state of the engagement section against the holding section,

wherein when the information memorized in the non-volatile memory is information expressing that the apparatus is in a connecting operation state, and, when the cutting section detecting sensor detects the cutting section moved to the tube cutting position and the holding section lock sensor detects the holding section engaged with the engagement section, the controlling section ~~judges~~ is programmed to judge that the reset operation is necessary and initiates the reset operation.

4-5.   (Canceled)

6.   (Previously Presented) A tube connecting apparatus according to claim 1, further comprising a position detecting sensor which detects that the holding section moved by the holding section movement unit reaches a connection finish position for contacting closely the end portions of the cut tubes each other,

wherein when the position detecting sensor detects that the holding section reaches the connection finish position, the controlling section drives the non-volatile memory to memorize information expressing that the apparatus is in a non-connecting operation state.

7.   (Previously Presented) A tube connecting apparatus according to claim 1, further comprising:

a cutting plate which is held by the cutting section replaceably; and

a cutting plate conveying section which conveys the cutting plate to the cutting section replaceably,

wherein the non-volatile memory is capable of memorizing exchange information of the cutting plate.

8.   (Previously Presented) A tube connecting apparatus according to claim 7, further comprising a cutting plate conveying section detecting sensor which detects the cutting plate conveying section,

wherein when the cutting plate conveying section detecting sensor detects the cutting plate conveying section, the controlling section drives the non-volatile memory to memorize information expressing the cutting plate being exchanged as the exchange information of the cutting plate.

9.   (Previously Presented) A tube connecting apparatus according to claim 7, further comprising:

an engagement section which engages at least a part of the holding section to prohibit the holding section from opening movement out of the pressing state of the tubes; and

a holding section lock sensor which detects an engagement state of the engagement section against the holding section,

wherein when the information memorized in the non-volatile memory is information expressing that the apparatus is in a non-connecting operation state, and, when the holding section lock sensor detects the holding section engaged with the engagement section, the controlling section drives the non-volatile memory to memorize information expressing the cutting plate being unexchanged as the exchange information of the cutting plate.

10.   (Original) A tube connecting apparatus according to claim 3, wherein the engagement section is a self-holding type solenoid into which a permanent magnet and a plunger are accommodated.

11-12. (Canceled)

13.   (Previously Presented) A tube connecting apparatus according to claim 7, wherein when the information memorized in the non-volatile memory is information expressing that the apparatus is in a non-connecting operation state, and, when the exchange information of the cutting plate memorized in the non-volatile memory is information expressing the cutting plate being unexchanged, the controlling section controls the cutting plate conveying section to convey the cutting plate to the cutting section.